

Remarks

This Amendment is in response to the Official Action mailed on December 16, 2004. A petition and fee for extension of the deadline for response by two months are enclosed. The Official Action acknowledged receipt of Applicants' Information Disclosure Statement which was filed on October 28, 2003. The Official Action rejected claims 1-20 under 35 U.S.C. § 103(a) as assertedly obvious over Miles et al. U.S. Patent No. 6,384,463 ("Miles") and in view of Keri U.S. Patent No. 5,861,656 ("Keri"). Claims 1, 6-9, 14 and 15 have been amended. New claims 21 and 22 have been added. Claims 2, 4, 5, 16 and 17 have been cancelled without prejudice. Claims 1, 3, 6-15, and 18-22 are presently pending.

Priority

The Official Action asserts that the U.S. filing date is 10/30/2003. The correct U.S. filing date, as confirmed by the Filing Receipt mailed on 10/23/2003, is 7/28/2003. Applicants respectfully traverse the misstatement of the filing date of this application.

Information Disclosure Statement

The Official Action makes reference to foreign patents and documents cited by applicants. For the record, no such foreign patents and foreign documents have been cited herein by the applicants. Further, Applicants wish to clarify the record to reflect that the Information Disclosure Statement was filed under a proper certificate of First Class mailing, on October 28, 2003.

The Art Rejection

Claims 1-20 stand rejected under 35 U.S.C. § 103(a) as assertedly obvious over Miles and in view of Keri. Applicants respectfully traverse this rejection in view of the above amendments in the claims and the discussion below.

Claim 1 has been amended to be more clear and distinct. The limitations of original claims 4 and 5 have been incorporated into claim 1, and claims 4 and 5 have been cancelled without prejudice. Claim 1 now recites that the doped semiconductor is an absorber. Claim 1 further now recites that the semiconductor absorber and dissipative conductor are capable of dissipating crosstalk radiation having a center frequency within a range of between about 1 gigahertz and about 1,000 gigahertz. Claim 14 has been amended in an analogous manner.

Miles relates to a high voltage guard ring for protecting a sensitive low voltage area from a high voltage area on the same integrated circuit. Col. 1, lines 5-11. Fig. 1 shows an integrated circuit 1, having a low voltage area 2 screened from a high voltage area 3 by a guard ring 4. Col. 2, lines 33-35. The guard ring comprises a metal guard ring 6, beneath which is an isolated silicon guard ring 8. Alternative semiconductor material can be used in place of the silicon guard ring, and an alternative conductor such as polysilicon can be used for the metal guard ring. Col. 4, lines 1-6. The metal guard ring 6 and silicon guard ring 8 are electrically connected at spaced apart intervals by conductive elements 10. The conductive elements 10 are also connected to a low impedance voltage source, or ground. Col. 2, lines 41-53. Fig. 3 further shows the metal guard ring 6 and silicon guard ring 8 electrically connected at spaced apart intervals by metal connection plates 18. Col. 3, lines 13-21. If high energy particles migrate across the surface of the device, they meet an area of metal which is exposed through the passivation layer 13. They are attracted to this and their charge is conducted to ground.

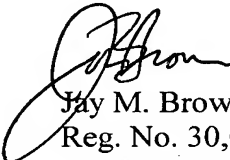
Miles fails to disclose and fails to suggest a doped semiconductor absorber. Miles further fails to disclose and fails to suggest a dissipative conductor. Miles employs its metal guard ring 6 and silicon guard ring 8 to conduct particles emitted from a high voltage source, to ground. Miles does not disclose nor suggest providing protection against high frequency cross talk radiation. Miles' device can conduct particles from a high voltage source to ground, but Miles fails to disclose and fails to suggest a device constructed with capability of absorbing and dissipating radiation. In particular, Miles fails to disclose and fails to suggest a semiconductor absorber and a dissipative conductor that are capable of dissipating crosstalk radiation having a center frequency within a range of between about 1 gigahertz and about 1,000 gigahertz. Accordingly, Miles fails to disclose and fails to suggest claim 1 or 14 as amended.

Keri relates to a high voltage integrated circuit suitable for preventing the formation of parasitic MOS-transistors. Col. 1, lines 5-7. Keri discloses a high voltage integrated circuit with metal conductors connected to ground or to potential near ground and covered by a passivating layer. Keri discloses that formation of parasitic MOS-transistors is prevented by breaking up the passivating layer above the metal conductors. Col. 1, lines 51-56; col. 2, line 67 – col. 3, line 6. Fig. 6 shows Keri's metal conductors 30 and 32, provided with slots 34 and 36. Col. 3, lines 16-20.

Keri fails to disclose and fails to suggest a doped semiconductor absorber. Keri further fails to disclose and fails to suggest a dissipative conductor. Keri employs its metal conductors 30 and 32 to transport charge carriers to ground. Keri does not disclose nor suggest providing protection against high frequency cross talk radiation. Keri's device can conduct charge carriers to ground, but Keri fails to disclose and fails to suggest a device constructed with capability of absorbing and dissipating radiation. In particular, Keri fails to disclose and fails to suggest a semiconductor absorber and a dissipative conductor that are

capable of dissipating crosstalk radiation having a center frequency within a range of between about 1 gigahertz and about 1,000 gigahertz. Accordingly, Keri fails to disclose and fails to suggest claim 1 or 14 as amended. Therefore, Miles and Keri, taken alone or in combination, fail to disclose and fail to suggest claim 1 or 14 as amended. Accordingly, Miles and Keri further fail to disclose and fail to suggest, taken alone or together, claims 3, 6-13, 15, or 18-22.

Respectfully submitted,

A handwritten signature in black ink, appearing to read "Jay M. Brown", is written over the printed name and address.

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